

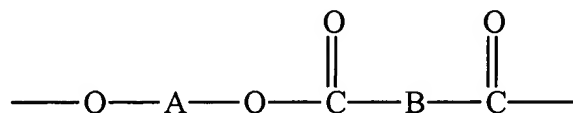
Amendments to the Claims

The following listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

Claims 1-31 (Cancelled)

Claim 32 (Currently amended) A method for polymerizing a macrocyclic oligoester comprising a structural repeat unit of the formula

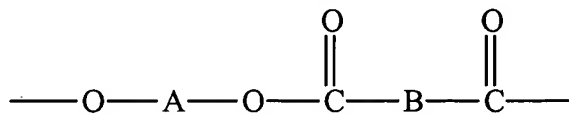


where A is an alkylene, a cycloalkylene, or a mono- or polyoxyalkylene group; and B is a divalent aromatic or alicyclic group, the method comprising the step of contacting, at an elevated temperature, a macrocyclic oligoester and a polymerization catalyst, the polymerization catalyst comprising a polymeric group comprising 25 or more carbon atoms.

Claim 33 (Original) The method of claim 32 wherein the polymerization catalyst comprises a polyalkylene group.

Claim 34 (Original) The method of claim 32 wherein the macrocyclic oligoester and the polymerization catalyst are components of a blend material.

Claim 35 (Original) A method for polymerizing a macrocyclic oligoester comprising the steps of
(a) providing a molten macrocyclic oligoester, wherein the macrocyclic oligoester comprises a structural repeat unit of the formula



where A is an alkylene, a cycloalkylene or a mono- or polyoxyalkylene group; and B is a divalent aromatic or alicyclic group;

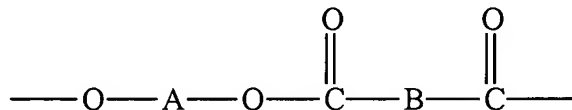
(b) providing a molten polymerization catalyst, the polymerization catalyst comprising a polymeric group comprising 25 or more carbon atoms; and

(c) contacting the molten macrocyclic oligoester and the molten polymerization catalyst, thereby causing polymerization of the macrocyclic oligoester.

Claim 36 (Original) The method of claim 35 wherein the contacting step (c) takes place in a mold.

Claim 37 (Currently amended) A method for polymerizing a macrocyclic oligoester comprising the steps of

(a) providing a molten macrocyclic oligoester in a mixing chamber, wherein the macrocyclic oligoester comprises a structural repeat unit of the formula



where A is an alkylene, a cycloalkylene or a mono- or polyoxyalkylene group; and B is a divalent aromatic or alicyclic group;

(b) providing a molten polymerization catalyst ~~of claim 1~~ in the mixing chamber, the polymerization catalyst comprising a polymeric group comprising 25 or more carbon atoms;

(c) mixing the molten macrocyclic oligoester and the molten polymerization catalyst in the mixing chamber; and

(d) introducing a ~~the~~ mixed molten macrocyclic oligoester and ~~the~~ polymerization catalyst into a mold.

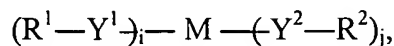
Claims 38-40 (Cancelled)

Claim 41 (New) The method of claim 33 wherein the polyalkylene group is at least one of a polyethylene group, a poly(1,2-butylene) group, a poly(ethylene-ran-1,2-butylene) group, and a polyethylene-block-poly(ethylene glycol) group.

Claim 42 (New) The method of claim 32 wherein the polymerization catalyst comprises a polyether group.

Claim 43 (New) The method of claim 42 wherein the polyether group is at least one of a poly(ethylene glycol), a poly(propylene glycol), and a polyethylene-block-poly(ethylene glycol) group.

Claim 44 (New) The method of claim 32 wherein the polymerization catalyst comprises a compound having the molecular formula:



wherein

each of i and j independently is an integer where $i \geq 0$, $j \geq 1$, and $i + j \leq 4$;

each R^1 independently is, or two or more R^1 groups taken together are, an alkyl group or an alkyl ether group each having between 1 and 20 carbon atoms;

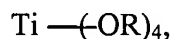
each R^2 independently is a polymeric group comprising 25 or more carbon atoms, wherein at least one R^2 comprises at least one of (i) a polyalkylene group comprising 25 or more carbon atoms and (ii) a polyether group;

each Y^1 and Y^2 independently is a single bond or a heteroatom selected from the group consisting of O, S, and N; and

M is Ti, Sn, or $-Z^1-(X)_k-Z^2-$, wherein Z^1 is Ti or Sn, Z^2 is Ti or Sn, each X independently is O or $O-R^3-O$, wherein R^3 is an alkylene group, and k is 1, 2, or 3.

Claim 45 (New) The method of claim 32 wherein the polymerization catalyst comprises a metal selected from the group consisting of titanium and tin.

Claim 46 (New) The method of claim 32 wherein the polymerization catalyst comprises a compound having the molecular formula:



wherein each R independently is a polymeric group comprising 25 or more carbon atoms.

Claim 47 (New) The method of claim 46 wherein at least one R is a polyalkylene group comprising 25 or more carbon atoms.

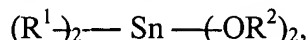
Claim 48 (New) The method of claim 47 wherein the polyalkylene group is selected from the group consisting of a polyethylene group, a poly(1,2-butylene) group, a poly(ethylene-ran-1,2-butylene) group, and a polyethylene-block-poly(ethylene glycol) group.

Claim 49 (New) The method of claim 46 wherein at least one R is a polyether group.

Claim 50 (New) The method of claim 49 wherein the polyether group is selected from the group consisting of a poly(ethylene glycol), a poly(propylene glycol), and a polyethylene-block-poly(ethylene glycol) group.

Claim 51 (New) The method of claim 46 wherein at least one R is a polyalkylene group and at least one R is a polyether group.

Claim 52 (New) The method of claim 32 wherein the polymerization catalyst comprises a compound having the molecular formula:



wherein

each R^1 independently is, or two R^1 groups taken together are, an alkyl group or an alkyl ether group each having between 1 and 20 carbon atoms; and

each R^2 independently is a polymeric group comprising 25 or more carbon atoms.

Claim 53 (New) The method of claim 52 wherein each R^1 independently is an alkyl group and at least one R^2 is a polyalkylene group comprising 25 or more carbon atoms.

Claim 54 (New) The method of claim 53 wherein R^1 is a butyl group and R^2 is selected from the group consisting of a polyethylene group, a poly(1,2-butylene) group, a poly(ethylene-ran-1,2-butylene) group, and a polyethylene-block-poly(ethylene glycol) group.

Claim 55 (New) The method of claim 52 wherein each R^1 independently is an alkyl group and at least one R^2 is a polyether group.

Claim 56 (New) The method of claim 32 wherein a blend material comprises the macrocyclic oligoester and the polymerization catalyst.

Claim 57 (New) The method of claim 35 wherein the polymerization catalyst comprises a polyalkylene group.

Claim 58 (New) The method of claim 57 wherein the polyalkylene group is selected from the group consisting of a polyethylene group, a poly(1,2-butylene) group, a poly(ethylene-ran-1,2-butylene) group, and a polyethylene-block-poly(ethylene glycol) group.

Claim 59 (New) The method of claim 35 wherein the polymerization catalyst comprises a polyether group.

Claim 60 (New) The method of claim 59 wherein the polyether group is selected from the group consisting of a poly(ethylene glycol), a poly(propylene glycol), and a polyethylene-block-poly(ethylene glycol) group.

Claim 61 (New) The method of claim 35 wherein the polymerization catalyst comprises a compound having the molecular formula:



wherein

each of i and j independently is an integer where $i \geq 0$, $j \geq 1$, and $i + j \leq 4$;

each R^1 independently is, or two or more R^1 groups taken together are, an alkyl group or an alkyl ether group each having between 1 and 20 carbon atoms;

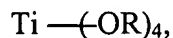
each R^2 independently is a polymeric group comprising 25 or more carbon atoms, wherein at least one R^2 comprises at least one of (i) a polyalkylene group comprising 25 or more carbon atoms and (ii) a polyether group;

each Y^1 and Y^2 independently is a single bond or a heteroatom selected from the group consisting of O, S, and N; and

M is Ti, Sn, or $-Z^1-(X)_k-Z^2-$, wherein Z^1 is Ti or Sn, Z^2 is Ti or Sn, each X independently is O or $O-R^3-O$, wherein R^3 is an alkylene group, and k is 1, 2, or 3.

Claim 62 (New) The method of claim 35 wherein the polymerization catalyst comprises a metal selected from the group consisting of titanium and tin.

Claim 63 (New) The method of claim 35 wherein the polymerization catalyst comprises a compound having the molecular formula:



wherein each R independently is a polymeric group comprising 25 or more carbon atoms.

Claim 64 (New) The method of claim 63 wherein at least one R is a polyalkylene group comprising 25 or more carbon atoms.

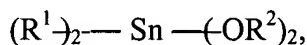
Claim 65 (New) The method of claim 64 wherein the polyalkylene group is selected from the group consisting of a polyethylene group, a poly(1,2-butylene) group, a poly(ethylene-ran-1,2-butylene) group, and a polyethylene-block-poly(ethylene glycol) group.

Claim 66 (New) The method of claim 63 wherein at least one R is a polyether group.

Claim 67 (New) The method of claim 66 wherein the polyether group is selected from the group consisting of a poly(ethylene glycol), a poly(propylene glycol), and a polyethylene-block-poly(ethylene glycol) group.

Claim 68 (New) The method of claim 63 wherein at least one R is a polyalkylene group and at least one R is a polyether group.

Claim 69 (New) The method of claim 35 wherein the polymerization catalyst comprises a compound having the molecular formula:



wherein

each R^1 independently is, or two R^1 groups taken together are, an alkyl group or an alkyl ether group each having between 1 and 20 carbon atoms; and

each R^2 independently is a polymeric group comprising 25 or more carbon atoms.

Claim 70 (New) The method of claim 69 wherein each R^1 independently is an alkyl group and at least one R^2 is a polyalkylene group comprising 25 or more carbon atoms.

Claim 71 (New) The method of claim 70 wherein R^1 is a butyl group and R^2 is selected from the group consisting of a polyethylene group, a poly(1,2-butylene) group, a poly(ethylene-ran-1,2-butylene) group, and a polyethylene-block-poly(ethylene glycol) group.

Claim 72 (New) The method of claim 69 wherein each R^1 independently is an alkyl group and at least one R^2 is a polyether group.

Claim 73 (New) The method of claim 72 wherein R^1 is a butyl group and R^2 is selected from the group consisting of a poly(ethylene glycol), a poly(propylene glycol), and a polyethylene-block-poly(ethylene glycol) group.